

PCT/10

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 10/089,2

CRF Processing Date:

Edited by:

Verified by:

4/24/2002

- Changed a file from non-ASCII to ASCII **ENTERED**
- Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- Edited a format error in the Current Application Data section, specifically:

- Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other _____.
- Added the mandatory heading and subheadings for "Current Application Data".
- Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- Changed the spelling of a mandatory field (the headings or subheadings), specifically:

- Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

- Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

- Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- Inserted colons after headings/subheadings. Headings edited included:

- Deleted extra, invalid, headings used by an applicant, specifically:

- Deleted: non-ASCII "garbage" at the beginning/end of files; secretary initials/filename at end of file;
 page numbers throughout text; other invalid text, such as _____.
- Inserted mandatory headings, specifically: _____
- Corrected an obvious error in the response, specifically: _____
- Edited identifiers where upper case is used but lower case is required, or vice versa.
- Corrected an error in the Number of Sequences field, specifically: _____
- A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- Other: Seq 2 - changed 'R' to 'N' in L2237 response



PCT10

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089,211

DATE: 04/24/2002
TIME: 07:51:59

Input Set : N:\Crf3\04172002\J089211.raw
Output Set: N:\CRF3\04242002\J089211.raw

P.6

1 <110> APPLICANT: Hintz et al.
 2 <120> TITLE OF INVENTION: Mannosidases and Methods for using the Same
 3 <130> FILE REFERENCE: 62447
 4 <140> CURRENT APPLICATION NUMBER: US/10/089,211
 5 <141> CURRENT FILING DATE: 2002-03-25
 6 <150> PRIOR APPLICATION NUMBER: PCT/US00/27210
 7 <151> PRIOR FILING DATE: 2000-10-02
 8 <150> PRIOR APPLICATION NUMBER: 60/157,341
 9 <151> PRIOR FILING DATE: 1999-10-01
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48	atcacaaatg agctcgaaaa gtatcaggat ttgacaaaagc ttcccggtt gtggcctctc	1860
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51	acaagacaaa ttcatgaggg cggagagcct gtccgtcatg acaatgattc gttgaaaacg	2040
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55	atgtatcaga aggccatgga cacagtgcga gaatatctt tttatcagcc aatgtcaag	2280
56	aataatcgcg atgtccgctt cttagcgaca gtttagtatga caaagagcct tgatgcaa	2340
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93	atgcagcgcc tgcaacaact tgacactatc aagtcggcgt tcttacatgc gtggaa	600
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089,211

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/089,211

DATE: 04/24/2002

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 Output Set: N:\CRF3\04242002\J089211.raw

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148 130 135 140
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150 145 150 155 160
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152 165 170 175
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154 180 185 190
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156 195 200 205
157 Asp Glu Val Arg Pro Leu Arg Gly Gly Phe Lys Asp Thr Phe Asn Gly
158 210 215 220
159 Trp Gly Ala Thr Leu Val Asp Ala Leu Asp Thr Leu Trp Ile Met Asp
160 225 230 235 240
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162 245 250 255
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164 260 265 270
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166 275 280 285
167 Thr Asp Ile Leu Leu Glu Lys Ser Val Glu Leu Ala Asp Val Leu Met
168 290 295 300
169 Asp Ala Phe Asp Thr Pro Asn Arg Met Pro Thr Leu Thr Thr Lys Trp
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171 Ser Pro Glu Thr Ala Ser Glu Phe Arg Arg Gly Asp Phe Lys Ala Val
172 325 330 335
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174 340 345 350
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176 355 360 365
177 Glu Leu Glu Lys Thr Gln Asp Leu Thr Lys Leu Pro Gly Leu Trp Pro
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180 385 390 395 400
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182 405 410 415
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184 420 425 430
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186 435 440 445
187 Val Ser Val Asp Thr Arg Thr Pro Pro Pro Lys Gln Asp Cys Thr Gly
188 450 455 460
189 Gly Leu Asn Asp Gln Leu Ser Gly Ile Asp Lys Phe Gly Leu Gly Ala
190 465 470 475 480
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192 485 490 495
193 Gly Gly Asn Asn Asp Gln Thr Leu Asn Met Thr Gln Lys Ala Met Asp

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203	Asp Lys Asp Leu Lys Leu Gly Ser Gln Leu Thr Asp Gly Cys Val Trp		
204	580	585	590
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207	Val Pro Cys Lys Lys Gly Glu Pro Cys Glu Trp Asp Glu Asp Ala Thr		
208	610	615	620
209	Thr Met Ala Met Asp Pro Thr Ala Asp Lys Arg Pro Ile Ser His Asn		
210	625	630	635
211	Lys Arg Ser Ala Gly Pro Glu Lys Gly Asn Trp His Val Val Ala Thr		
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213	Ala Glu Ser Ser Pro Gln Glu Asp Lys Thr Gln Lys Ser Thr Thr		
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215	Thr Glu Gly Arg His Thr Gly Thr Thr Gly Ala Gly Ala Leu Ser		
216	675	680	685
217	His Glu Glu Phe Val Thr Gly Lys Ile Leu Asn Asp Arg Leu Pro Pro		
218	690	695	700
219	Gly Met Thr Gly Ile Ser Ala Arg Gln Thr Leu Leu Arg Pro Glu Ala		
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221	Ile Glu Ser Val Phe Ile Met Phe Arg Leu Thr Gly Asp Pro Ser Trp		
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223	Arg Glu Lys Gly Trp Lys Met Phe Gln Ala Val Asp Lys Ala Thr Lys		
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225	Thr Glu Leu Ala Asn Ser Ala Ile Ser Asp Val Thr Val Asp Asn Pro		
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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/089,211

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Input Set : N:\Crf3\04172002\J089211.raw
Output Set: N:\CRF3\04242002\J089211.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 1632

Seq#:8; N Pos. 4

Seq#:15; N Pos. 9,18

Seq#:16; N Pos. 4,13,16,22,25

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:15; Line(s) 446

Seq#:16; Line(s) 458



PCT10

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089,211

DATE: 04/17/2002
 TIME: 11:59:37

Input Set : A:\62447.app
 Output Set: N:\CRF3\04172002\J089211.raw

PPS 1/2

3 <110> APPLICANT: Hintz et al.
 5 <120> TITLE OF INVENTION: Mannosidases and Methods for using the Same
 7 <130> FILE REFERENCE: 62447
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 C--> 10 <141> CURRENT FILING DATE: 2002-03-25
 12 <150> PRIOR APPLICATION NUMBER: PCT/US00/27210
 13 <151> PRIOR FILING DATE: 2000-10-02
 15 <150> PRIOR APPLICATION NUMBER: 60/157,341
 16 <151> PRIOR FILING DATE: 1999-10-01
 18 <160> NUMBER OF SEQ ID NOS: 19
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 22 <210> SEQ ID NO: 1
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 46 actatcattt tctgcatttc gcgagtgatc tgccttcga ctttccttct ttccagcgct 600
 48 gcggcgcctt cactctcggt gcctacgtt gaccacggtc ctacctctcc tactgctgat 660
 50 tattaggctc ctccctacgc ctccaataaca gggaaatcgcc cggccatgtt tcgtgcacga 720
 52 cgatctcgca tctcgcttgt gtttgcgtt atatttgcc tcctcatatt ccacttttagc 780
 54 cgtctcgcaat ttacgatcag cctgcaatct tgggtacctc cggccgcgtt cgatcaccat 840
 56 aatccccctt tccccgacca gaaacctaaa gatccatacg aaaacgacaa tagtgcgacc 900
 58 ggcagtgggg ctccctccgc tgcgttggta gagccagaag aataccaaacg accaccactt 960
 60 tacacagatt cagatgacag cccaaactccg tcaaaagaac gcctggacac cccgagacaat 1020
 62 gtcccatctc aggagcctga atttgatgcc gccagacttc agacgggtgc gcagacccaa 1080
 64 aataaacatg aagatgatga ggtatattgtc ccaatttctc actggaaagcc gatgcccgaa 1140
 66 cggcatccag tcagtccggaa ggctttgatc aagctgccaatcc cccggcaatc aaaggaactc 1200
 68 ccccaactgc aagctaagtt caaggacgag tcgtcctcgaa acaagatgca gcggctgcaa 1260
 70 caacttgcaca ctatcaagtc ggcttctta catgcgtggaa acggtttacaa gatctctgcc 1320
 72 atgggtcatg atgaggttag acctctgcgc ggtgggttca aggacacatt caatggctgg 1380
 74 ggcgcgaccc ttgtcgacgc ctggatacc ctgtggatca tggatctcaa agaggagttc 1440
 76 tccatggcag tcgactacgt caagaaaatc gattttacca ccagcaccaa gaaagagatt 1500
 78 ccggctttt aaaccactat tcgctaccta ggcgggatgc tcggggccta tgatatttcg 1560
 80 ggacacacaaat acgatataact ttggaaaag tctgttgagc ttggatggac 1620

Does Not Comply
 Corrected Diskette Needed

do edit

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089,211

DATE: 04/17/2002
TIME: 11:59:37

Input Set : A:\62447.app
Output Set: N:\CRF3\04172002\J089211.raw

82	gccttcgaca	caccgaacct	gatgccaacc	ctctattata	aatggagccc	agagtatgct	1680
84	tcaagtttc	gccgggggaa	ctttaaggt	gttctcgccg	agcttggc	tctctctc	1740
86	gagttcacgc	gtttggcgca	gttaccaaaa	caggacaagt	actacgatgc	aattgcacga	1800
88	atcacaaatg	agctcgaaaa	gtatcaggat	ttgacaaagc	ttcccggtt	gtggcctctc	1860
90	aacctggacg	catccgggt	caggcgagg	cccgccgtct	cgcgagagcc	tgctgcggct	1920
92	ggcagccag	tcaagatggc	ctctgacgag	atcaactcga	cgagctcggt	atcgatctgt	1980
94	acaagacaaa	ttcatgaggg	cgagagagct	gtccgtcatg	acaatgatc	gtttgaaacg	2040
96	ggtttccctg	tatcagtgc	tactcgact	cctccccaa	agcaagatg	cacccggaggc	2100
98	ctcaacgatc	agctctcagg	cattgacaaag	ttcggactcg	gagcccttgg	tgactctacg	2160
100	tacgagta	taccgaaaga	gtatatgtt	ctccgggtt	acaacgacca	gtacctcaac	2220
102	atgtatcaga	aggccatgg	cacagtgcga	gaatatctt	tttatcagcc	aatgctcaag	2280
104	aataatcg	atgtccgctt	cttagcgaca	gttagtatga	caaagagct	tatgcaaac	2340
106	cctccggggc	gtaccactt	cgcgtacgaa	ggcactcacc	tcacctgtt	tgctgggtgt	2400
108	atgcttgc	ttggcgccaa	gttgggggg	cttgataagg	atctaaagct	gggttagtcaa	2460
110	ctgacggacg	gctgtgtct	ggcatatgaa	gccacaaagt	ccggaatcat	gccggaaagca	2520
112	ttccaaactgg	tccctgtaa	gaaaggcgag	ccatgcgaat	gggatgagga	cgcataactac	2580
114	atggccatgg	atccttatgc	cgacaagcg	ccaatatcac	ataacaaacg	ctccggccggc	2640
116	cctgaaaagg	ggaattggc	cgatcgcc	acagccgaat	cgttccg	ccaggaagat	2700
118	aaaacacaga	aatcaaccac	tactgaggg	cgacacaccg	gtacaactac	cggggcaggg	2760
120	gcgcctcgc	acgaggaatt	cgtcacgg	aaaatcctca	acgaccgact	ccgcggggc	2820
122	atgacaggga	tctcggtcg	cgatcactc	cttcgcccgg	aggcgatcg	gtctgtctc	2880
124	atcatgttcc	gcctcacgg	cgatccttcc	tggcgaaa	agggttgaa	gatgttccag	2940
126	gctgtcgaca	aagccacgaa	gacggagct	gcgaactcgg	ccatttccg	cgtAACCGTC	3000
128	gataatccac	gccccgtg	cagtatggaa	tcatttgc	ttgcggagac	tctgaaatac	3060
130	ttctaccttc	tttcagc	tccaaggct	gtgagcctt	acgaatatgt	tttgtaaatg	3120
132	atgcttgc	taatcgact	tttgcgt	actttccct	taggaacacc	gaggctcatc	3180
134	cgttcaagcg	acccaagtac	tgaagtacta	atttaaatg	tcttttagcc	tgtatctata	3240
136	catggccgct	ccgctgtaga	agcattgata	ccattaagac	agtatcg	cattcgta	3300
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155	atattccact	ttagccgtct	cgcgttacg	atcagccctgc	aatcttgggt	acccggccg	120
157	cccgatc	accataatcc	cccttcccc	gaccagaacc	tcaaagatcc	atacgaaaac	180
159	gacaatagt	cgacccggc	tggggctc	ccgcctgcgt	tggtagagcc	agaagaatac	240
161	caacgaccac	cactttacac	agattcagat	gacagccaa	ctccgtcaaa	agaacgcctg	300
163	gacacccg	gcaatgtccc	atctcaggag	cctgaattt	atgcgc	acttcagacg	360
165	ggtgcgcaga	cccaaaataa	acatgaagat	gttggggata	tttgc	acttcaactgg	420
167	aagccgatgc	ccgaacggc	tccagtca	ccggaggctt	tgtcaagct	gccaacccgg	480
169	caatcaaagg	aactccccca	actgcaagct	aagtcaagg	acgagtcgtc	ctcgacaaag	540
171	atgcagcg	tgcaacaact	tgacactatc	aagtccgt	tcttacatgc	gtggaaacgg	600
173	tacaagatct	ctgcatgg	tcatgtatg	gttagac	tcgcgggtgg	tttcaaggac	660

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089,211

DATE: 04/17/2002
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Input Set : A:\62447.app
Output Set: N:\CRF3\04172002\J089211.raw

175	acattcaatg	gctggggcgc	gacccttgc	gacgccttg	ataccctgtg	gatcatggat	720									
177	ctcaaagagg	agtctccat	ggcagtcac	tacgtcaaga	aaatcgatt	taccaccagc	780									
179	accaagaaaag	agattccgg	ctttgaacc	actattcgct	acctaggcgg	gatgctcggg	840									
181	gcctatgata	tttccggaca	caaatacgt	atactttgg	aaaagtctgt	tgagcttgcg	900									
183	gatgtcttga	tggacgcctt	cgacacaccg	aaccggatgc	caaccctcta	ttataaatgg	960									
185	agcccagagt	atgcttcaga	gtttcgccgg	ggggacttta	aggctgtct	cgccgagctt	1020									
187	ggtctctct	ctctcgagtt	cacgcgtttg	gcccagttga	ccaaacacgga	caagtactac	1080									
189	gatgcaattg	cacgaatcac	aaatgagtc	gaaaagtata	aggatttgac	aaagcttccc	1140									
191	ggcttgtggc	ctctcaacct	ggacgcattc	gggtgcaggc	gagttcccg	cgtctcgcga	1200									
193	gaggctgctg	cggctgggca	gccagtcaga	tggccctctg	acgagatcaa	ctcgacgagc	1260									
195	tcggtatctgt	atcgatacaag	acaaattcat	gagggcggag	agccgttccg	tcatgacaat	1320									
197	gattcgttt	aaacgggttt	tcctgtatca	gtcgataactc	ggactccccc	cccaaagcaa	1380									
199	gattgcacccg	gaggcctcaa	cgatcagtc	tcagggattt	acaagttcgg	actcggagcc	1440									
201	cttggtgact	ctacgtacga	gtacttaccg	aaagagtata	tgttgctcgg	cggtaaacaac	1500									
203	gaccagtacc	tcaacatgta	tcagaaggcc	atggacacag	tgcgagaata	tcttgtttat	1560									
205	cagccaatgc	tcaagaataa	tcgcgtatgc	cgcttcttag	cgacagttag	tatgacaaag	1620									
W--> 207	agccttgatg	cnnaaacctcc	ggggcgttacc	actttcgctgt	acgaaggcac	tcacccatcacc	1680									
209	tgttttgcgt	gtggatgtct	tgccatttgc	gccaaggttgt	ttgggcttga	taaggatcta	1740									
211	aagctgggtt	gtcaactgac	ggacggctgt	gtctgggcat	atgaagccac	aaagtccgga	1800									
213	atcatgcccc	aagcattcca	actggccctt	tgttaaaaaag	gcccgcattt	cgaatggat	1860									
215	gaggacgcatt	actacatggc	catggatccct	tatgccaca	agcggccaaat	atcacataac	1920									
217	aaacgctccg	ccggccctga	aaagggaaat	tggcacgtt	tgcacacagc	cgaatcgctt	1980									
219	tcgccccagg	aagataaaaac	acagaaatca	accactactt	agggtcgaca	caccggatca	2040									
221	actaccgggg	caggcgcgtt	ctcgcacgag	gaattcgtt	cggggaaaat	cctcaacgac	2100									
223	cgactccgc	cgggcatgac	aggatctcg	gtctggcagt	accccttccg	cccgaggcgc	2160									
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227	tggaaagatgt	tccaggctgt	cgacaaagcc	acgaagacgg	agctggcgaa	ctcgccatt	2280									
229	tccgacgtaa	ccgtcgataa	tccacgccc	gtggacagta	tggatcatt	ctggcttgcg	2340									
231	gagactctga	aataacttcta	ccttctttt	agcgatccaa	gcctggtgag	ccttgaggaa	2400									
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244	1				5				10						15	
247	Phe	Val	Leu	Leu	Ile	Phe	His	Phe	Ser	Arg	Leu	Ala	Val	Thr	Ile	Ser
248					20				25						30	
251	Leu	Gln	Ser	Trp	Val	Pro	Pro	Pro	Pro	Val	Asp	His	His	Asn	Pro	Pro
252					35				40						45	
255	Phe	Pro	Asp	Gln	Asn	Leu	Lys	Asp	Pro	Thr	Glu	Asn	Asp	Asn	Ser	Ala
256					50				55						60	
259	Thr	Gly	Ser	Gly	Ala	Pro	Pro	Pro	Ala	Leu	Val	Glu	Pro	Glu	Glu	Thr
260	65				70				75						80	
263	Gln	Arg	Pro	Pro	Leu	Thr	Thr	Asp	Ser	Asp	Asp	Ser	Pro	Thr	Pro	Ser
264					85				90						95	
267	Lys	Glu	Arg	Leu	Asp	Thr	Pro	Ser	Asn	Val	Pro	Ser	Gln	Glu	Pro	Glu
268					100				105						110	

RAW SEQUENCE LISTING
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Input Set : A:\62447.app
Output Set: N:\CRF3\04172002\J089211.raw

271 Phe Asp Ala Ala Arg Leu Gln Thr Gly Ala Gln Thr Gln Asn Lys His
272 115 120 125
275 Glu Asp Asp Glu Asp Ile Val Pro Ile Ser His Trp Lys Pro Met Pro
276 130 135 140
279 Glu Arg His Pro Val Ser Pro Glu Ala Leu Ile Lys Leu Pro Thr Gly
280 145 150 155 160
283 Gln Ser Lys Glu Leu Pro Gln Leu Gln Ala Lys Phe Lys Asp Glu Ser
284 165 170 175
287 Ser Ser Asp Lys Met Gln Arg Leu Gln Gln Leu Asp Thr Ile Lys Ser
288 180 185 190
291 Ala Phe Leu His Ala Trp Asn Gly Thr Lys Ile Ser Ala Met Gly His
292 195 200 205
295 Asp Glu Val Arg Pro Leu Arg Gly Gly Phe Lys Asp Thr Phe Asn Gly
296 210 215 220
299 Trp Gly Ala Thr Leu Val Asp Ala Leu Asp Thr Leu Trp Ile Met Asp
300 225 230 235 240
303 Leu Lys Glu Glu Phe Ser Met Ala Val Asp Thr Val Lys Lys Ile Asp
304 245 250 255
307 Phe Thr Thr Ser Thr Lys Lys Glu Ile Pro Val Phe Glu Thr Thr Ile
308 260 265 270
311 Arg Thr Leu Gly Gly Met Leu Gly Ala Thr Asp Ile Ser Gly His Lys
312 275 280 285
315 Thr Asp Ile Leu Leu Glu Lys Ser Val Glu Leu Ala Asp Val Leu Met
316 290 295 300
319 Asp Ala Phe Asp Thr Pro Asn Arg Met Pro Thr Leu Thr Thr Lys Trp
320 305 310 315 320
323 Ser Pro Glu Thr Ala Ser Glu Phe Arg Arg Gly Asp Phe Lys Ala Val
324 325 330 335
327 Leu Ala Glu Leu Gly Ser Leu Ser Leu Glu Phe Thr Arg Leu Ala Gln
328 340 345 350
331 Leu Thr Lys Gln Asp Lys Thr Thr Asp Ala Ile Ala Arg Ile Thr Asn
332 355 360 365
335 Glu Leu Glu Lys Thr Gln Asp Leu Thr Lys Leu Pro Gly Leu Trp Pro
336 370 375 380
339 Leu Asn Leu Asp Ala Ser Gly Cys Arg Arg Val Pro Gly Val Ser Arg
340 385 390 395 400
343 Glu Pro Ala Ala Ala Gly Gln Pro Val Arg Trp Ser Ser Asp Glu Ile
344 405 410 415
347 Asn Ser Thr Ser Ser Val Ser Thr Arg Thr Arg Gln Ile His Glu Gly
348 420 425 430
351 Gly Glu Pro Val Arg His Asp Asn Asp Ser Phe Glu Thr Gly Phe Pro
352 435 440 445
355 Val Ser Val Asp Thr Arg Thr Pro Pro Pro Lys Gln Asp Cys Thr Gly
356 450 455 460
359 Gly Leu Asn Asp Gln Leu Ser Gly Ile Asp Lys Phe Gly Leu Gly Ala
360 465 470 475 480
363 Leu Gly Asp Ser Thr Thr Glu Thr Leu Pro Lys Glu Thr Met Leu Leu
364 485 490 495
367 Gly Gly Asn Asn Asp Gln Thr Leu Asn Met Thr Gln Lys Ala Met Asp

RAW SEQUENCE LISTING
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Input Set : A:\62447.app
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368	500	505	510
371	Thr Val Arg Glu Thr Leu Val Thr Gln Pro Met Leu Lys Asn Asn Arg		
372	515	520	525
375	Asp Val Arg Phe Leu Ala Thr Val Ser Met Thr Lys Ser Leu Asp Ala		
376	530	535	540
379	Asn Pro Pro Gly Arg Thr Thr Phe Ala Thr Glu Gly Thr His Leu Thr		
380	545	550	555
383	Cys Phe Ala Gly Gly Met Leu Ala Ile Gly Ala Lys Leu Phe Gly Leu		
384	565	570	575
387	Asp Lys Asp Leu Lys Leu Gly Ser Gln Leu Thr Asp Gly Cys Val Trp		
388	580	585	590
391	Ala Thr Glu Ala Thr Lys Ser Gly Ile Met Pro Glu Ala Phe Gln Leu		
392	595	600	605
395	Val Pro Cys Lys Lys Gly Glu Pro Cys Glu Trp Asp Glu Asp Ala Thr		
396	610	615	620
399	Thr Met Ala Met Asp Pro Thr Ala Asp Lys Arg Pro Ile Ser His Asn		
400	625	630	635
403	Lys Arg Ser Ala Gly Pro Glu Lys Gly Asn Trp His Val Val Ala Thr		
404	645	650	655
407	Ala Glu Ser Ser Pro Gln Glu Asp Lys Thr Gln Lys Ser Thr Thr		
408	660	665	670
411	Thr Glu Gly Arg His Thr Gly Thr Thr Gly Ala Gly Ala Leu Ser		
412	675	680	685
415	His Glu Glu Phe Val Thr Gly Lys Ile Leu Asn Asp Arg Leu Pro Pro		
416	690	695	700
419	Gly Met Thr Gly Ile Ser Ala Arg Gln Thr Leu Leu Arg Pro Glu Ala		
420	705	710	715
423	Ile Glu Ser Val Phe Ile Met Phe Arg Leu Thr Gly Asp Pro Ser Trp		
424	725	730	735
427	Arg Glu Lys Gly Trp Lys Met Phe Gln Ala Val Asp Lys Ala Thr Lys		
428	740	745	750
431	Thr Glu Leu Ala Asn Ser Ala Ile Ser Asp Val Thr Val Asp Asn Pro		
432	755	760	765
435	Arg Pro Val Asp Ser Met Glu Ser Phe Trp Leu Ala Glu Thr Leu Lys		
436	770	775	780
439	Thr Phe Thr Leu Leu Phe Ser Asp Pro Ser Leu Val Ser Leu Glu Glu		
440	785	790	795
443	800	805	810
444	815		
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457	atgcatggcc catcagcctg aagcacttcc ccaagcaaag tcgagactcg gacaccgatg	180	
459	atatccctgc tgtccctgac tggatgtatcg tgcatgcccc tgccgtggct cccctttca	240	
461	ctccgcctgg tctcoagtct ccaactccca tggatgtatcg ctggccccc cccgcctcca	300	

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence.

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/089,211

DATE: 04/17/2002

TIME: 11:59:38

Input Set : A:\62447.app

Output Set: N:\CRF3\04172002\J089211.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:743 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:810 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15
L:816 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:825 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16
L:831 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16